



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,891	03/04/2004	Keisuke Goto	01-578	4794
23400	7590	10/25/2005	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			CHAPMAN JR, JOHN E	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/791,891	GOTO, KEISUKE	
	Examiner	Art Unit	
	John E. Chapman	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are objected to because of the following informalities:

In claim 1, line 1, “capacitive-type” should be changed to --capacitive--. While it is believed that one of ordinary skill in the art would understand what is claimed in light of the specification, there are instances in which the addition of the word “type” to an otherwise definite expression has been held to be indefinite. See MPEP 2173.05(b)(E). Accordingly, it is suggested that “capacitive-type” be changed to --capacitive-- in claim 1, line 1. Likewise for “capacitive-type” in line 1 of claims 2-5.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what it means for wirings to be “symmetrically formed with respect to wiring resistance” in line 13-14. Note that “symmetrically” is a geometrical concept, whereas “resistance” is an electrical concept. Note also that symmetrically formed wirings do not guarantee that the resistances are the same, nor do equalized resistances guarantee that the wirings are symmetrically formed. It is suggested that it be changed to --symmetrically formed with respect to each other to have substantially the same wiring resistance--.

4. Claims 1, 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geen et al. in view of the admitted prior art.

Geen discloses a capacitive-type semiconductor sensor in Fig. 3 comprising a plurality of sensor chips 152a-152d formed on a semiconductor substrate, each of the sensor chips having fixed electrodes 160a-160d and 161a-161d and movable electrodes attached to inner frames 154a-154d, wherein a wiring interconnects the fixed electrodes 160a and 161b (col. 5, lines 44-64). A node is formed at approximately the midpoint of the wiring so as to interconnect the fixed electrodes 160a and 161b with fixed electrodes 160c and 161d. Accordingly, the only difference between the claimed invention and the prior art consists in providing a shared pad at the node in the wiring connecting fixed electrodes 160a and 161b. It is well known in the art to provide a pad in order to connect an electrode to circuitry, as taught by pads 5a-5c in Fig. 4 of the admitted prior art. It would have been obvious to one of ordinary skill in the art to provide a first pad at the node between fixed electrodes 160a and 161b for the purpose of connecting a wiring to the fixed electrodes 160c and 161d.

Regarding claim 3, sensor chips 152a and 152b are operable in reverse directions.

Regarding claim 4, it would have been obvious to one of ordinary skill in the art to provide a second pad at the node between fixed electrodes 160b and 161a for the purpose of connecting a wiring to the fixed electrodes 160d and 161c.

Regarding claim 6, sensor chips 152a and 152b are operable in reverse directions.

5. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


7. Applicant's arguments filed September 16, 2005 have been fully considered but they are not persuasive. Applicant argues that the fails to teach or suggest "a shared pad connected to the fixed electrodes of the plurality of sensor chips and shared thereby." However, the Geen et al. reference teaches a plurality of wirings connected to fixed electrodes and interconnected at a node, and the use of a pad for interconnecting wirings is well known in the art, as evidence by pads 5a-5c in Fig. 4 of the admitted prior art. Accordingly, merely to place a shared pad at the common node in the Geen et al. reference would have been obvious to one of ordinary skill in the art for the purpose of interconnecting the wirings. Applicant further argues that Geen fails to teach or suggest the "the wirings are symmetrically formed with respect to wiring resistances from the shared pad to the fixed electrodes of the sensor chips." However, the wirings between the fixed electrodes 160a and 161b in Fig. 3 are symmetrically formed, and the wiring resistances from the fixed electrodes 160a and 161b to the common node would be substantially the same. Accordingly, the claims fail to distinguish in any unobvious manner over the prior art.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E. Chapman whose telephone number is (571) 272-2191. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN E. CHAPMAN
PRIMARY EXAMINER